

Cutting data recommendations for solid carbide drills

Feed and cutting speed

Tritan-Drill-Alu | SCD681

MMG*	Workpiece material	Strength/ hardness [N/mm ²] [HRC]	Cutting speed v_c [m/min]				Feed f [mm] for drill diameter						
			Internal cooling	External cooling	MQL	Air	4,00	5,50	7,50	10,50	14,50	20,00	
N	N1	N1.1 Aluminium, unalloyed and alloyed < 3% Si		300	200	250		0,42	0,53	0,66	0,82	1,00	1,15
		N1.2 Aluminium, alloyed \leq 7% Si		250	180	200		0,53	0,68	0,85	1,07	1,31	1,52
		N1.3 Aluminium, alloyed > 7-12% Si		220	150	180		0,53	0,68	0,85	1,07	1,31	1,52
		N1.4 Aluminium, alloyed > 12% Si		180	120	150		0,53	0,68	0,85	1,07	1,31	1,52
	N2	N2.1 Copper, unalloyed and low alloyed	< 300	140	100			0,42	0,53	0,66	0,82	1,00	1,15
		N2.2 Copper, alloyed	> 300	120	90			0,53	0,68	0,85	1,07	1,31	1,52
		N2.3 Brass, bronze, gunmetal	< 1.200	200	160	160	120	0,46	0,61	0,79	1,02	1,26	1,48

* MAPAL machining groups

The specified machining values are guide values.

The optimum data for the respective machining task should be determined during the test or machining.